Nez Perce - Clearwater National Forest Biological Assessment/Evaluation Summary of Effects For Threatened and Sensitive Plant Species

Project Name: Cherry Exploration

The Biological Evaluation process (FSM 2672.43) is intended to conduct and document activities necessary to ensure proposed management actions will not jeopardize the continued existence or cause adverse modification of habitat for species that are listed or proposed to be listed as Endangered or Threatened by the U.S. Fish and Wildlife Service and species listed as Sensitive by the U.S. Forest Service, Region 1. Direction in FSM 2670.5 states, "Biological Evaluation, A documented Forest Service review of Forest Service programs or activities in sufficient detail to determine how an action or proposed action may affect any threatened, endangered, proposed or sensitive species."

Threatened and endangered species included in this analysis are consistent with the current U.S. Fish and Wildlife Service species list. The only federally listed species known or suspected to occur on the Forest are Spalding's catchfly (*Silene spaldingii*) and MacFarlane's four-o'clock (*Mirabilis macfarlanei*); both limited to parts of the Salmon River basin and water howellia (*Howellia aquatilis*), which is limited to the lower Palouse River basin. Whitebark pine (*Pinus albicaulis*) is a candidate for federal listing and is also addressed in the biological assessment.

This biological evaluation is also prepared to determine the project's effects on forty one sensitive plant species that occur or are expected to occur on the Nez Perce - Clearwater National Forest. The determinations are summarized in the table below. Rational for determinations are provided following the table.

Species Determinations

Plant Species	Cat.*	Species Presence	Habitat Presence	Species Potentially Affected?	Habitat Potentially Affected?	Determination**
Water howellia Howellia aquatilis	Т	No	No	No	No	NE
MacFarlane's four-o'clock Mirabilis macfarlanei	Т	No	No	No	No	NE
Spalding's catchfly	T	No	No	No	No	NE

Plant Species	Cat.*	Species Presence	Habitat Presence	Species Potentially Affected?	Habitat Potentially Affected?	Determination**
Silene Spaldingii						
Whitebark pine Pinus albicaulis	С	No	No	No	No	NE
Maidenhair spleenwort Asplenium trichomanes	S	No	No	No	No	NI
Payson's milkvetch Astragalus paysonii	S	Potential	Yes	Yes	Yes	MI/BI
Deerfern Blechnum spicant	S	No	No	No	No	NI
Crenulate moonwort Botrychium crenulatum	S	No	No	No	No	NI
Lance-leaf moonwort Botrychium lanceolatum var. lanceolatum	S	No	No	No	No	NI
Slender moonwort Botrychium lineare	S	No	No	No	No	NI
Mingan moonwort Botrychium minganense	S	No	No	No	No	NI
Mountain moonwort Botrychium montanum	S	No	No	No	No	NI
Northern moonwort Botrychium pinnatum	S	No	No	No	No	NI
Least moonwort Botrychium simplex	S	No	No	No	No	NI
Bug-on-a-stick Buxbaumia aphylla	S	No	No	No	No	NI
Green bug-on-a-stick Buxbaumia viridis	S	No	No	No	No	NI
Broadfruit mariposa Calochortus nitidus	S	No	No	No	No	NI
Contance's bittercress Cardamine constancei	S	No	No	No	No	NI
Buxbaum's sedge Carex buxbaumii	S	No	No	No	No	NI
Bristle-stalked sedge Carex leptalea	S	No	No	No	No	NI
Many headed sedge	S	No	No	No	No	NI

Plant Species	Cat.*	Species Presence	Habitat Presence	Species Potentially Affected?	Habitat Potentially Affected?	Determination**
Carex sychnocephala						
Anderegg's cladonia	S	No	No	No	No	NI
Cladonia andereggii	3	NO	NO	NO	NO	INI
Pacific dogwood	S	No	No	No	No	NI
Cornus nuttallii	5	110	110	110	110	111
Clustered lady's slipper	S	No	No	No	No	NI
Cypripedium fasciculatum	5	110	110	110	110	111
Dasynotus	S	No	No	No	No	NI
Dasynotus daubenmirei	~		110	110	110	1.12
Idaho douglasia	S	No	No	No	No	NI
Douglasia idahoensis						·
Giant helleborine	S	No	No	No	No	NI
Epipactis gigantea						
Puzzling halimolobos	S	No	No	No	No	NI
Halimolobos perplexa var. perplexa						-
Sticky goldenweed	S	No	No	No	No	NI
Haplopappus hirtus var. sonchifolius Light hookeria						
Hookeria lucens	S	No	No	No	No	NI
Salmon-flowered desert-parsley						
Lomatium salmoniflorum	S	No	No	No	No	NI
Chickweed monkeyflower						
Mimulus alsinoides	S	No	No	No	No	NI
Spacious monkeyflower	_					
Mimulus ampliatus	S	No	No	No	No	NI
Thin sepal monkeyflower		NY	No	No	No	NI
Mimulus hymenophyllus	S	No				
Gold-back fern						
Pentagramma triangularis var.	S	No	No	No	No	NI
triangularis						
Sweet coltsfoot	S	No	No	No	No	NI
Petasites frigidus var. palmatus						1N1
Licorice fern	S	S No	No	No	No	NI
Polypodium glycyrrhiza						
Naked-stem rhizomnium	S	No	No	No	No	NI
Rhizomnium nudum	S	110	110	110	110	141

Plant Species	Cat.*	Species Presence	Habitat Presence	Species Potentially Affected?	Habitat Potentially Affected?	Determination**
Mendocino sphagnum Sphagnum mendocinum	S	No	No	No	No	NI
Evergreen kittentail Synthyris platycarpa	S	No	No	No	No	NI
Sierra wood-fern Thelypteris nevadensis	S	No	No	No	No	NI
Short-style sticky tofieldia Triantha occidentalis ssp. brevistyla	S	No	No	No	No	NI
Douglas clover Trifolium douglasii	S	No	No	No	No	NI
Plumed clover Trifolium plumosum var. amplifolium	S	No	No	No	No	NI
Idaho barren strawberry Waldsteinia idahoensis	S	Potential	Yes	Yes	Yes	MI/BI

^{*}Category: T = Threatened; E = Endangered; P = Proposed; C = Candidate; S = Sensitive

Determinations Rational

Botanists have reviewed this project, used available information on species distributions and habitat (using one or more of the following: topo maps, aerial photos, field reconnaissance, previous surveys, habitat modeling), and then assessed the potential for impacts for all federal listed and Region 1 sensitive species. If the project was determined to have **no effect** or **no impact**, this determination was based on one or more of these criteria:

- habitat for the species is not present in the project area.
- habitat for the species is present but the species does not occur in this area.
- habitat for the species is present, the species occurs or may occur in the project area, but the project would not have any direct, indirect or cumulative effects on this species.

^{**}Federally listed (Threatened) Species Determination: NE = No Effect; BE = Beneficial Effect; NL = Not likely to adversely affect; LT = Likely to adversely affect. Sensitive Species Determination: NI = No Impact; BI = Beneficial Impact; MI = May impact individuals or habitat but not likely to cause trend toward federal listing or reduce viability for the population or species; LI = Likely to impact individuals or habitat with the consequence that the action may contribute towards federal listing or result in reduced viability for the population or species.

Both Idaho barren strawberry and Payson's milkvetch occur in the general vicinity and have suitable habitat at the proposed worksite. There is potential that the mechanical disturbance could damage or extirpate plants. The actions would also disturb the ground surface and help promote open conditions at the site, both of which are well known to enhance or maintain preferred habitat for these species. Thus the project may impact individuals, but also benefit the species at the site.

The proposed activities of this project would have no effects or impacts that would lead to any extraordinary circumstances for any TES plant species.

BOTANIST__/s/ Michael Hays_

DATE_July 21, 2017